USDA **United States Department of Agriculture** **Forest Service** **Allegheny National Forest Supervisor's Office**

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Dear Interested Party:

If you are interested in changes to the monitoring program that accompanies the Allegheny National Forest (ANF) Land and Resource Management Plan (Forest Plan), please read on.

On October 26, 2015, we shared with you that the ANF was planning to review and propose changes to our Forest Plan monitoring program (pp. 37-51; http://www.fs.usda.gov/main/allegheny/landmanagement/planning) using the administrative change process ((36 CFR §219.13(c)).

The first objective of our review was to bring our monitoring program into compliance with new planning regulations. The new planning regulations, referred to as the 2012 Planning Rule, require our monitoring program to address the following:

1. The status of select watershed conditions.
2. The status of select ecological conditions including key characteristics of terrestrial and aquatic ecosystems.
3. The status of focal species to assess ecological conditions.
4. The status of a select set of ecological conditions that contribute to the recovery of federally listed threatened and endangered species, conserve proposed and candidate species, and maintain a viable population of each species of conservation concern.
5. The status of visitor use, visitor satisfaction, and progress toward meeting recreation objectives.
6. Measureable changes on the plan area related to climate change and other stressors that may be affecting the plan area.
7. Progress toward meeting the desired conditions and objectives in the plan, including for providing multiple use opportunities.
8. The effects of each management system to determine that they do not substantially and permanently impair the productivity of the land (16 USA 1604(g)(3)c)).

The second objective of our review was to identify monitoring questions and indicators that test assumptions underpinning management decisions, track conditions relevant to management of resources on the ANF, and measure management effectiveness and progress toward achieving desired conditions and objectives.

Three new monitoring questions were added to bring our monitoring program into compliance with the 2012 Planning Rule. Specifically, questions were developed to measure changes on the ANF related to climate change (length and timing of the growing season) and monitor the status of focal species to assess select ecological conditions (brook trout-quality cold-water ecosystems and pileated woodpecker-large dead, damaged, and disease trees across the landscape). In addition, to ensure our monitoring program is effective and targeted to inform and improve our management, we modified how some of the monitoring questions were asked and removed other

monitoring questions. Those monitoring questions removed are no longer relevant to the management of resources on the ANF, result in redundancy in our monitoring and evaluation efforts, or will be addressed through other efforts.

We would like to invite you to review and comment on the draft updated monitoring program posted here: http://www.fs.usda.gov/main/allegheny/landmanagement/planning. Comments need to be received by April 4, 2016, to be considered in the development of the final updated monitoring program. They can either be sent electronically to Collin Shephard at collinmshephard@fs.fed.us, or in hard copy via hand-delivery between 8am and 4:30pm Monday through Friday or mailed to:

Allegheny National Forest – Supervisor's Office
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Warren, PA 16365

If you have any questions or would like to receive a hard copy of the draft updated monitoring program, please contact Collin Shephard at (814) 728-6142 or collinmshephard@fs.fed.us.

Thank you for your interest in the ANF.

Sincerely,

/s/ Sherry A. Tune

SHERRY A. TUNE
Forest Supervisor

Monitoring

Monitoring and evaluation are separate, sequential activities required by the National Forest Management Act (NFMA). Monitoring is the collection of data by observation or measurement. Evaluation is the analysis and interpretation of monitoring data. The purpose of monitoring and evaluation is to determine whether or not Forest Plan implementation activities comply with Forest Plan direction, if the application of Forest Plan standards and guidelines is meeting Forest Plan goals and objectives, and how effective implementation has proved to be in moving the ANF toward Forest Plan desired conditions. The results of monitoring and evaluation can verify implementation activities or ultimately lead to changes in Forest Plan management direction or Forest Plan components

Forest Plan Monitoring Requirements

The monitoring and evaluation requirements for the Forest Plan (Table 13) address the following:

1. The status of select watershed conditions.
2. The status of select ecological conditions including key characteristics of terrestrial and aquatic ecosystems.
3. The status of focal species to assess ecological conditions.
4. The status of a select set of ecological conditions that contribute to the recovery of federally listed threatened and endangered species, conserve proposed and candidate species, and maintain a viable population of each species of conservation concern.
5. The status of visitor use, visitor satisfaction, and progress toward meeting recreation objectives.
6. Measureable changes on the plan area related to climate change and other stressors that may be affecting the plan area.
7. Progress toward meeting the desired conditions and objectives in the plan, including for providing multiple use opportunities.
8. The effects of each management system to determine that they do not substantially and permanently impair the productivity of the land (16 USA 1604(g)(3)c)).

The elements of Table 13 are described below:

Column 1 – Contains a description of the action, effect, resource, or Forest Plan objective to be addressed.

Column 2 – Contains a specific monitoring question. It is written to provide managers and interested publics with answers about how the Forest Plan is being implemented. The scope of the questions provide information on the level of accomplishment, the effectiveness of standards and guidelines, the status of changing resource conditions, and the underlying science supporting resource decisions and the effects of our actions.

Column 3 – Contains a one or more monitoring indicators. Monitoring indicators are quantitative or qualitative variables that can be measured or described and, when observed periodically, show trends in conditions that are relevant to the associated monitoring questions.

Column 4 – The monitoring frequency specifies how often the indicator data will be collected and the evaluation frequency specifies how often the monitoring indicator data will be analyzed, interpreted, and reported.

Every two years, new information gathered through the monitoring program will be evaluated in a report made available to the public. This biennial evaluation will focus on new data and results for the monitoring questions and indicators scheduled for evaluation in the given year and determine whether there is a need for an administrative correction, amendment, or revision to the Forest Plan.

Research Needs

Research items listed in Table 14 are used to develop new information pertinent to the Desired Condition and are not a Forest Plan decision.

Table 13. Monitoring and Evaluation Requirements

Action, effect, resource, or Forest Plan objective	Monitoring Question	Monitoring Indicator(s)	Monitoring / Evaluation Frequency
Effects of management practices	To what extent have standards and guidelines been applied?	Project-level implementation and effectiveness of Forest Plan design criteria	Annual / 2 years
Comparison of projected and actual outputs and services	How do actual outputs and services compare to those projected?	Comparison of actual outputs to those projected in Forest Plan (Tables 2-4)	Annual / 2 years
Comparison of actual and estimated costs	What are actual costs in comparison to estimated costs?	Comparison of estimated and actual costs of Forest Plan implementation	Annual / 2 years
Effects to lands and communities adjacent to or near the National Forest	What are the economic effects of National Forest management actions to communities near the National Forest?	Value of management actions to communities	Annual / 4 years
Climate change	How is growing season length changing on the ANF?	Length and timing of the frost-free season	Annual / 2 years
1920 Land and Resource Management Planning			
Complete a management plan for the area surrounding the Allegheny Reservoir including that portion of the National Recreation Area.	Has the Recreation Site Analysis been completed for existing developed recreation areas around the Allegheny Reservoir and are measures being implemented in accordance with recommended actions?	Status of Recreation Site Analysis	Annual / 4 years
2080 Noxious Weeds			
Collaborate with other agencies/entities to establish seed and mulch mixes appropriate to limit introduction and spread of invasives species for use on the ANF.	Have seed and mulch mixes been established for the ANF that will limit the spread of invasive species?	Number of seed and mulch mixes approved for use	Annual / 2 years

Noxious weeds	How effective have herbicide and manual invasive species controls been at eliminating targeted species?	Acres treated and effectiveness of treatment	Annual / 2 years
2300 Recreation			
Increase the number of inventoried dispersed sites and Concentrated Use Areas (CUAs) managed to standard to reduce health, safety, and resource impacts caused by unmanaged recreation use in the general forest area. Provide ancillary support facilities, such as parking areas and toilets, as needed, to protect resources and the environment.	Are dispersed sites and CUAs being managed to prevent resource damage?	Level of resource damage	Annual / 2 years
Manage for desired Recreation Opportunity Spectrum (ROS) settings as indicated in each management area's desired condition description.	Are desired ROS settings being achieved?	Visitor Management, Visitor Impacts, Social Encounters, Access, Remoteness, Naturalness, and Facilities and Site Management	Annual / 4 years
Recreation	Is resource damage occurring from motorized and non-motorized use in unauthorized areas?	Level of resource damage	Annual / 2 years
2350 Trails			
For all trails, establish trail classes, permitted uses, construction, reconstruction, and maintenance priorities.	Are Trail Management Objectives (TMOs) being met? Are trail design standards, maintenance/construction specifications, and scheduling appropriate for the type and frequency of use each trail receives?	Status of TMO implementation and assessment of trail condition	Annual / 2 years
Evaluate ANF road system to identify which roads are suitable for snowmobile use utilizing the Travel Management Process.	Are roads and trails designated for snowmobile use marked and signed?	Status of snowmobile trail marking and signage	Annual / 2 years

Facilitate regular grooming of the designated snowmobile trail system if Commonwealth funding is available.	To what degree has the ANF contributed to snowmobile grooming?	Miles of snowmobile trails groomed	Annual / 2 years
Utilize partnerships with snowmobile clubs, local communities, state agencies, and private landowners to provide snowmobile system connectors across private lands to Tionesta, Ridgway, Sheffield, and Bradford.	What connectors have been developed?	Miles of connector developed	Annual / 4 years
2360 Heritage			
Develop management plans for the long-term preservation of heritage resources that are either listed on or eligible for the National Register of Historic Places.	How many management plans have been completed?	Number of completed management plans	Annual / 2 years
Reduce the backlog of heritage sites that require evaluation and nomination to the National Register of Historic Places.	How many evaluations have been completed? How many heritage resources have been nominated?	Number of evaluations and nominations	Annual / 2 years
Work with appropriate representatives of the Seneca Nation of Indians to develop a confidential inventory of culturally sensitive sites.	Has an inventory of sites culturally sensitive to American Indian Tribes with ancestral ties to the ANF landscape been completed?	Status of culturally sensitive site inventory	Annual / 2 years
2380 Scenery			
Maintain or exceed adopted Scenic Integry Levels (SILs) as seen from Concern Level 1 and 2 travel routes and use areas.	Are we meeting or exceeding SILs?	SILs as seen from Concern Level 1 and 2 travel routes and use areas	Annual / 2 years
2400 Vegetation			
Lands are adequately restocked within five years of regeneration harvest	Have lands been adequately restocked within five years of regeneration harvest?	Percent seedling stocking at five years following even-aged or uneven-aged regeneration harvest	Annual / 2 years
Maximum opening size from even-aged management (EAM) and the need for change	What is the maximum size opening from EAM? Is there a need to change the standard?	Maximum size in acres of temporary openings created from EAM	Annual / 2 years

Prescriptions and effects	How have prescriptions and effects been measured?	Comparison of desired (silvicultural prescription) and actual residual stand stocking, compostion, and structure	Annual / 2 years
Provide vegetative diversity across the landscape by providing a diversity of age classes, including late structural and multi-age conditions, to achieve desired future conditions.	How does the diversity of age classes and structural conditions compare to plan objectives?	Age class/structural condition distribution by acres	Annual / 2 years
In MAs 1.0, 2.1, and 3.0, utilize salvage sales to achieve multiple use objectives and recover timber value within two years of an event that kills or damages trees, such as insect infestation, disease, ice, wind, fire, or other catastrophic event.	How many acres in MA 1.0, 2.1, or 3.0 sustained damage from insects, disease, ice, wind, fire, or catastrophic event? How many acres were salvaged within 2 years of the event?	Acres in MA 1.0, 2.1, or 3.0 damaged and damaged acres salvaged within two years	Annual / 4 years
Provide a conifer component of greater than 15 basal area per acre on a minimum of 10 percent of the ANF.	What percent of the ANF has a conifer component (>15 basal area per acre)?	Percent of forest cover with >15 feet basal area in conifer species	6 years / 6 years
Provide an oak component of greater than 15 basal area per acre on 15 to 20 percent of the ANF.	What percent of the ANF has an oak component (>15 basal area per acre)?	Percent of forest cover with >15 feet basal area in oak species	6 years / 6 years
Maintain 70 percent forest cover on the ANF.	What is the percent of forest cover on the ANF?	Percent of forest cover	6 years / 6 years
Manage permanent grass and shrub openings on a minimum of two percent of the ANF, favoring native shrubs and herbaceous species.	What percent of the ANF is in permanent grass or shrub openings?	Percent of permanent grass or shrub openings	6 years / 6 years
Maintain moderate to well-stocked stands (relative density) on more than 90 percent of the forest land on the ANF.	What percent of ANF forest land contain moderate to well-stocked stands?	Percent of forest cover that is moderately or well-stocked stands	6 years / 6 years

Vegetation	For EAM and UEAM, characterize stocking, species composition, and seedling establishment time, particularly with regard to the various opening sizes under UEAM. What refinements need to be made to silvicultural practices?	Comparison of desired (silvicultural prescription) and actual residual stand stocking, compostion, and structure	2 years / 4 years
	What is the forest composition (overstory and understory) in areas actively managed, as well as in areas with little active vegetation management?	Description of overstory and understory composition of actively managed areas and areas with little active management	6 years / 6 years
	What are significant changes in forest health? What threats to forest health are present?	Status of impacts from insects and disease, and overall forest health conditions	Annual / 2 years
	How effective are herbicide design criteria in protecting water? To what extent are herbicides drifting into buffer areas? Are water quality protection criteria being met?	Discussion of visual and water quality effectiveness monitoring	Annual / 2 years
	Are management activities, natural events, and other disturbances maintaining adequate numbers of large dead, damaged, or diseased trees across the landscape?	Presence/absence of pileated woodpecker	Annual / 2 years
2500 Watershed and Air			
Complete soil and water restoration projects on 10 to 50 acres, annually.	How many acres of soil and water restoration projects have been accomplished?	Acres of soil and water restoration projects	Annual / 2 years
Apply site-specific prescriptions to restore compositional and/or structural diversity of riparian corridors on 50 to 100 acres, annually.	How many riparian acres have been treated to improve vegetative diversity? Have prescriptions improved riparian conditions for the benefit of riparian-dependent resources?	Acres of riparian area treated and effect of treatment	Annual / 2 years
Watershed and Air	What is the status of water quality on the ANF?	Discussion of water quality monitoring and macroinvertebrate sampling	Annual / 2 years

Watershed and Air	How are management activities, natural events, and other disturbances affecting soils?	Discussion of soil quality standard monitoring	Annual / 2 years
	How are management activities, natural events, and other disturbances affecting quality, cold-water ecosystems?	Presence/absence of brook trout	Annual / 2 years
2600 Wildlife, Fish, and Sensitive Plant Habitat			
Cerulean warbler	How much cerulean warbler nesting habitat does the ANF provide?	Acres of cerulean warbler nesting habitat	6 years / 6 years
	What is the status of the cerulean warbler on the ANF?	Number of individuals documented	Annual / 2 years
Northern goshawk	What is the status of the northern goshawk on the ANF?	Number of active territories	Annual / 2 years
Timber rattlesnake	What is the status of the timber rattlensnake on the ANF?	Number of known and historic dens	Annual / 2 years
Manage white-tailed deer populations at 10 to 20 deer per square mile to sustain herbaceous and woody species diversity across the landscape.	What is the deer density across the landscape?	Estimate of deer per square mile	Annual / 2 years
Manage active great blue heron colonies to ensure a stable or increasing population trend.	What is the status of the great blue heron on the ANF?	Number of active colonies	Annual / 2 years
Manage occupied northern flying squirrel nesting sites to ensure a stable or increasing population trend.	What is the status of the northern flying squirrel on the ANF?	Number of occupied nesting sites	Annual / 2 years
Manage known locations of plant species with viability concerns to ensure a stable or increasing population trend.	How many locations of plant species with viability concerns are known on the ANF?	Number of individuals/ populations	Annual / 2 years
Manage suitable nesting habitat for yellow-bellied flycatcher to ensure a stable or increasing population trend.	How much suitable nesting habitat does the ANF provide for the yellow-bellied flycatcher?	Acres of suitable nesting habitat	6 years / 6 years

Manage active red-shouldered hawk territories to ensure a stable or increasing population trend.	What is the status of the red-shouldered hawk on the ANF?	Number of active territories	Annual / 2 years
Manage occupied osprey nesting sites to ensure a stable or increasing population trend.	What is the status of the osprey on the ANF?	Number of occupied nesting sites	Annual / 2 years
Prevent the introduction of zebra mussels into the Allegheny Reservoir and the Allegheny River from Forest Service boat launch sites.	Are aquatic invasive species (AIS) present in the Allegheny Reservoir and Allegheny River? What is the risk of AIS introduction from Forest Service boat launches?	AIS documented in the Allegheny Reservoir and Allegheny River and risk of AIS introduction from Forest Service boat launches	Annual / 2 years
Maintain or increase productivity of bald eagles on the ANF.	What is the status of the bald eagle on the ANF?	Number of active nests and their productivity	Annual / 2 years
Wildlife, Fish, and Sensitive Plant Habitat	Are bald eagle conservation measures being implemented?	Status of conservation measure implementation	Annual / 2 years
	Are conservation measures being implemented for bat species listed, proposed, or candidate for protection under the Endangered Species Act?	Status of conservation measure implementation	Annual / 2 years
	Are conservation measures being implemented for mussel species listed, proposed, or candidate for protection under the Endangered Species Act?	Status of conservation measure implementation	Annual / 2 years
	What is the amount and distribution of quality remote, high quality remote, and interior habitat across the landscape? How much late structural and old growth habitat is provided?	Acres of quality remote, high quality remote, interior, late structural, and old growth habitat	6 years / 6 years
	What is the level of standing and downed woody debris across the landscape?	Distribution of standing and downed woody debris by size class	6 years / 6 years

Wildlife, Fish, and Sensitive Plant Habitat	How is understory plant species diversity changing across the landscape?	Description of understory species composition	6 years / 6 years
	Are project mitigation measures effectively reducing impacts to existing locations of plant species with viability concerns?	Number and type of mitigations	Annual / 2 years
	If federally listed plants have been identified, what conservation measures are being implemented?	Status of conservation measure implementation	Annual / 2 years
2800 Minerals and Geology			
Establish a formal, multi-agency working group, including representatives from the ANF, Pennsylvania Department of Environmental Protection, and other state and federal agencies, to coordinate policies and processes regarding the management of oil and gas resources and infrastructure on the ANF.	Are Forest Service representatives participating in Oil, Gas and Mineral (OGM) development work/discussion groups?	Level of Forest Service participation on workgroups/ committees associated with OGM development	Annual / 2 years
Establish and maintain an inventory of all oil and gas development (OGD) on the ANF.	Has an inventory of all OGD been established and is it being maintained?	Status of OGD inventory	Annual / 2 years
Minerals and Geology	To what extent is new federal OGD meeting Forest Plan design criteria?	Level that new federal OGD is meeting Forest Plan design criteria	Annual / 2 years
5400 Land Ownership			
Work with partners to acquire subsurface ownership of lands in MAs 5.1, 5.2, 7.1, 8.1, 8.2, 8.3, 8.4, and 8.5 and withdraw these lands from future mineral development.	Have subsurface rights been acquired in these management areas? To what extent have these rights been withdrawn?	Acres of subsurface acquired/withdrawn	Annual / 2 years

7700 Transportation System			
Road maintenance activities to protect investments, minimize environmental effects, and provide public safety will occur on a minimum of 150 miles of passenger car roads (operation maintenance level (OML) 3 to 5) and a minimum of 100 miles of high clear vehicle (OML 2) roads, annually.	How many miles of road maintenance have been accomplished?	Miles of road maintenance	Annual / 2 years
Evaluate road benefits and risks and decommission two miles of roads that are no longer needed, annually.	How many miles of road have been decommissioned?	Miles of road decommissioning	Annual / 2 years
Surface an additional five miles of roads with limestone to minimize sediment delivery to streams, annually.	How many miles of road have been surfaced with limestone?	Miles of road surfaced with limestone	Annual / 2 years

Table 14. Research Questions

Resource Area	Research Question
Soil	To what extent is soil acidification affecting the physical, chemical, and biological processes and functions?
Wildlife	What is the impact of the hemlock woolly adelgid to wildlife on the ANF, specifically, impacts to Northern flying squirrels, impacts to species that utilize hemlock for thermal cover (deer, turkeys, grouse), and species that utilize hemlock for nesting (Blackburnian warblers, Swainson's thrush)? Which conifer species should be planted in place of hemlock to meet the needs of wildlife?
	What are the direct impacts of roads to rattlesnakes, wood and box turtles, amphibians and other less mobile species? At what landscape threshold of road density and/or traffic level do species declines begin to occur?
	Quantify the benefits of the landscape linkages to specific wildlife species in terms of (1) facilitating genetic interchange between sub-populations, (2) facilitating movement of less mobile species, and (3) enhancing species resiliency. At what level of activity (road building, timber harvesting, trail construction, oil and gas development and stone pit development) do the above 3 benefits begin to decline? What is the optimal corridor width for specific wildlife species?
	Given the current distribution of early structural habitats across the ANF, are any wildlife species declining because these habitats are not better connected?
	At what deer density is vegetative diversity and hunter satisfaction optimized?
Vegetation	What integrated pest management activities, including silviculture treatments, will help sustain healthy hemlock in the face of the expected hemlock wooly adelgid infestation?
	How can greater success be achieved in developing sugar maple seedlings or retaining existing healthy sugar maples, in order to sustain this species on appropriate sites on the ANF?
	How can we sustain healthy American beech? What activities will successfully regenerate beech seedlings that are resistant to the disease complex in the long term?
	What are the most economical and biologically feasible methods for: ▪ sustaining a diversity of tree species and forested conditions under even-aged management? ▪ ensuring diverse tree species develop and remain competitive in young stands? ▪ regenerating oak?
	What preventative/remedial strategies are available to respond to gypsy moth, cherry scallopshell moth, and emerald ash borer outbreaks and cherry red rot, ash die-back, and sudden oak death diseases?
	Investigate when the Allegheny hardwood forest type can be expected to substantially decline based on the following criteria: seed production, value, prevalence of internal defect, and tree mortality.